REPORT

OF THE

SURGEONS

OF THE

EDINBURGH VACCINE INSTITUTION,

CONTAINING

AN EXAMINATION OF THE OPINIONS AND STATE-MENTS OF MR BROWN OF MUSSELBURGH,

ON

VACCINATION.

DRAWN UP AT THE DESIRE OF THE MANAGERS, AND PUBLISHED BY
THEIR DIRECTION, FOR THE BENEFIT OF THE INSTITUTION.

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EXTRACT from the Minutes of a Quarterly
Meeting of the Managers of the Public Dispensary and Vaccine Institution of Edinburgh,
held 4th August 1809.

"THE MANAGERS having taken into consideration the

" Advertisement of a Book in opposition to Vacci-

" nation, by Mr Brown of Musselburgh, unanimously

" agreed to request the SURGEONS of the Vaccine

" Institution to report their opinion of that Publica-

" tion, and to state the facts which have occurred in their

" experience, tending to confirm or refute Mr Brown's

" doctrines. It was also agreed, that an extraordina-

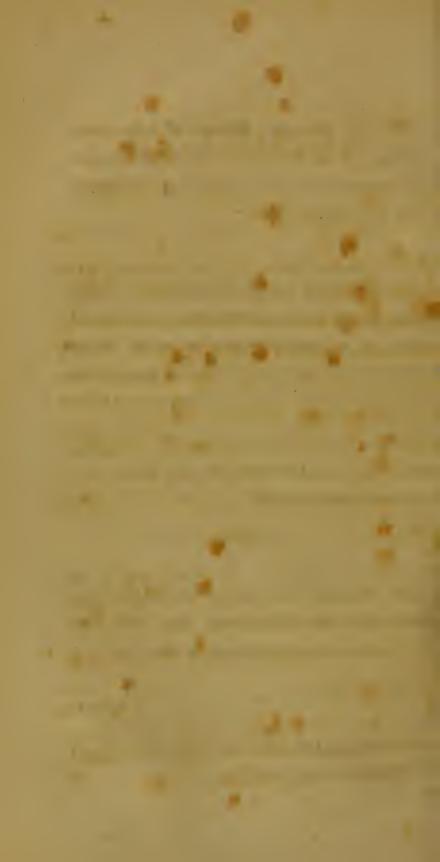
" ry meeting should be held, to receive that report, as

" soon as it was prepared."

Extraordinary Meeting of the Managers of the Public Dispensary and Vaccine Institution of Edinburgh, held 25th August 1809;

NINIAN Lowis, Esq; in the Chair.

A Report from the Surgeons of the Vaccine Institution was read and approved of; and the Managers unanimously directed, that it should be published for the benefit of the Institution.



REPORT, &c.

THE SURGEONS of the Vaccine Institution have received the request of the Managers, to report their opinion of the reasons published by Mr Brown of Musselburgh for doubting the efficacy of Vaccine Inoculation, and to state the facts which have occurred in their practice, tending to confirm or refute his doctrine.

The Surgeons have perused Mr Brown's book with much attention, and find that his grounds of opposition to the Vaccine practice, are,—

First, That the whole subject is involved in contradictions and obscurities, even in

the writings of its most strenuous advocates.

Secondly, That many circumstances have occurred in his investigations on the subject, which induce him to conclude, that though the security against small-pox may be regarded as nearly perfect immediately after vaccination*, yet that the antivariolous power of cowpox gradually wears out of the constitution, so that after three or four years, the person is as liable to be affected by smallpox contagion, and after five or six years, by inoculation, as if he had never been vaccinated †.

With regard to the first of these positions, the Surgeons can with confidence assert, that the greater part of the contradictions and obscurities mentioned by Mr Brown, do really exist no where but

^{*} Page 244.

in his own statements. In these, indeed, it must be confessed, they exist in such number and variety, that any one whose knowledge of vaccination was derived from his publication alone, would very readily assent to his opinion. The Surgeons cannot for a moment allow themselves to suspect Mr Brown of wilful misrepresentation, in order to establish his positions; but they find every where in his book such a misapprehension of the simplest doctrines of vaccination, and such a mistatement of the opinions of writers on that subject, as they confess it is difficult for them to account for on any other principle.

On this point the Reporters beg leave to state, that they are not acquainted with any contradictions or obscurities among the advocates of vaccination, concerning the principal facts relating to that subject, which ought in any degree to operate against a practice so beneficial to society; and that any differences of opinion on theoretical points of less importance, are merely such as must necessarily exist among men anxious to explain all the phenomena of a new and important discovery, and should rather act as a stimulus to more accurate observation, than be considered as operating to the prejudice of the discovery itself.

With regard to Mr Brown's second position, namely, That the cowpox gives at best but a temporary security against the smallpox; this, it must be observed, is by no means an original opinion. It is nearly as old as the practice of vaccination itself; and, though Mr Brown may not have known it, has often been refuted in the most satisfactory manner. The only peculiarity of Mr Brown's opinion on this point is, that he has extended the period of security one or two years beyond the period assigned by the former opponents of the practice.

In support of his opinion, Mr Brown brings forward forty-eight cases, in which he states that the natural smallpox has occurred after vaccination; and twelve, in which he produced smallpox by inoculation. Here, it is evident, two questions occur: First, Were these children vaccinated in a sufficient manner? and, secondly, If they were, had they really the smallpox?

With a view to ascertain these points, the following considerations deserve particular attention.

1. Mr Brown differs remarkably from all other inoculators in his opinion of the appearances of perfect vaccination, and the analogy on which he founds this opinion, (viz. from inoculation with the small-pox), is well known to be erroneous. At page 235., Mr Brown says, "The difference betwixt the practice of vaccination and inoculation" for the

smallpox, " is by no means so great as to throw away as useless, all that information which our former experience certainly imparted. I contend, that the phenomena, so far as they depend upon the vesicle and pustule, enabling us to judge of their producing the constitutional effect, are exactly the same. It was well known to those who had any experience in the practice of inoculation" for smallpox, "that every variation of the pustule and areola, were still capable of producing the constitutional influence. You might have every variety already noticed, as occurring in vaccination, and still the constitutional disease imparted in its greatest perfection. The areola was here looked upon as the decisive test of its influencing the system, and as a proof of the perfect satisfaction that existed, nobody ever dreamed of reinoculation where the pustule and arcola were obtained. The experience,

"therefore, that any practitioner formerly obtained under the practice of inoculation, is by no means to be laid aside as useless, in conducting that of vaccination, or enabling him to judge of its merits; on the contrary, I am seriously inclined to maintain, that if any practitioner has not had that experience, he is incompetent either to conduct or judge of vaccination, singly or comparatively.

"In conformity, then, both with my
"own experience of the phenomena of
"inoculation and vaccination, I contend,
"that if you have a vesicle, attended with
"an areola, you may depend upon the pro"duction of whatever effects it" [vaccination] "is capable of."

Now, with regard to inoculation for the smallpox, the Surgeons state it with the greatest confidence, as a well-known fact, that a pustule may be produced at the

inoculated part, which pustule may be surrounded by an inflammation or areola, even to the extent of half-a-crown piece, and contain matter capable of propagating the disease, but nevertheless may be merely a local affection, leaving the constitution as liable to be affected by smallpox at some future period, as if no pustule had been formed *. This has been confirmed by numerous cases, some of which terminated fatally. Mr Brown's opinion, therefore, has no support from the analogy of smallpox inoculation; and with regard to cowpox inoculation, the Surgeons can also with confidence assert, that a vesicle with an areola may be produced, without affording any protection against the smallpox, and that, of those vaccinated on Mr Brown's principle, a great proportion will still remain liable to

^{*} See the Cases of Dr Dawson, in the Transactions of the College of Physicians of London. vol. iii.

that disease. If, therefore, Mr Brown has thus conducted his inoculation for cowpox, it is by no means astonishing, that he has met with smallpox after supposed vaccination, the only wonder is, that he has met with it so seldom.

Mr Brown has quoted the Report of the Royal Jennerian Society on Vaccination. He should have known, that it is stated in that Report, that "it is a fact well ascertained, that in some particular states of certain constitutions, whether vaccine or variolous matter be employed, a local disease only will be excited by the inoculation, the constitution remaining unaffected; yet that matter taken from such local vaccine or variolous pustule, is capable of producing a general and perfect disease *." As this

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^{*} See Report of the Royal Jennerian Society for January 1806, art. 9.

statement, however, is not only not in conformity with, but in direct opposition to the result of Mr Brown's experience, both in variolous and in vaccine inoculation, the Surgeons are not surprised that he has entirely overlooked it.

But while the Surgeons are deeply impressed with the doubtful nature of Mr Brown's vaccination, they do not pretend to say that none of his forty-eight cases were perfectly vaccinated. They believe that many of them were, especially as some of them were not vaccinated by Mr Brown. The next question, therefore, is, Had they really smallpox? And here the Reporters go on to remark,

2dly, That Mr Brown's opinions on the appearances of constitutional smallpox, are as peculiar, and as much at variance with the generally received opinions of the medical world, as those on vaccination. Mr Brown maintains, that when-

ever you produce a pustule with areola or surrounding inflammation, you produce constitutional smallpox. When Mr Brown, therefore, inoculates with smallpox a person who has formerly been vaccinated, and produces a pustule with inflammation around it, he sets it down as a case of smallpox after vaccination; for, says Mr Brown, you cannot produce such a pustule in a person who has had the smallpox *. Now, the error of this statement is not matter of opinion, but matter of fact; for every surgeon knows, or ought to know, that pustules, large, and of a regular appearance, with surrounding inflammation, are often produced on the faces, necks and breasts of nurses, by the contact of children ill of smallpox, though these nurses had formerly passed through that disease; and surgeons have been personally known to

^{*} Pages 78.-235, 236, and 260.-r.

some of the reporters, who kept up a supply of smallpox matter for inoculation, by producing a succession of inoculated pustules upon their own arms. This has also been frequently practised by one of your Reporters, and the pustules were always attended with considerable surrounding inflammation, and occasionally with swelling of the glands in the axilla. The experience of Dr WILLAN, who has deservedly earned great fame in the medical world, by his accurate observations on cutaneous diseases, is also directly in opposition to Mr Brown's opinion on this point. In his Treatise on Vaccination, at page 15. Dr WILLAN says, "In " other instances of variolous inoculation " after vaccination, the pustules generally resembled that which is exhibited at " Plate I. No. X.;" (viz. a pustule, with a considerable degree of surrounding inflammation or areola); " a similar effect is " produced by inoculating with variolous " [smallpox] matter, a person who has pre-

" viously had the smallpox. The matter contained in the pustules thus excited. either after the smallpox or after vaccine inoculation, is capable of communicating smallpox to a person who has not before been affected with that disease." Dr Willan also gives a plate shewing the appearance of a pustule, attended with an areola or surrounding inflammation, made from the inoculated arm of a young woman who had had the smallpox fourteen years before, in order to compare it with the appearance on the arm of his own son, when inoculated with smallpox three years after vaccination. The pustules, he states, so nearly resembled each other, that he thought a repetition of the drawing unnecessary*. Now, with regard to Mr Brown's Cases of smallpox inoculation after vaccination, it appears to the Report-

^{*} Page 15. Note.

ers, that in eleven out of the twelve he produced nothing more than local pustules of this kind; and they do not hesitate to state it as their decided opinion, that not one of these was affected with constitutional smallpox. With regard to the remaining case, the 11th, constitutional symptoms, and an eruption of eighteen pustules, are stated to have followed the inoculation. Now, admitting this to have been smallpox, it need not be matter of astonishment to any one, that out of the number vaccinated by Mr Brown on his peculiar principle, some should remain liable to be affected with that disease; and such an occurrence, for the reasons already assigned, can never be supposed to operate to the prejudice of vaccination.

With regard to the cases given by Mr Brown, as cases of natural smallpox succeeding to vaccination, the Reporters have already stated, that they have no

proof of them having been properly vaccinated, but, on the contrary, strong reason to suspect that many of them were not. In one instance, (the 27th Case), it has come to their knowledge, that the inoculator informed the parents at the time, that the child was not properly vaccinated. Having ceased to visit in that neighbourhood, the gentleman could not repeat the inoculation himself, but recommended that this should be done, otherwise the child was liable to be infected with the smallpox.

But besides this, it is to be particularly observed, that by a most convenient and comprehensive doctrine, Mr Brown has made up his Forty-eight Cases by pressing into his service many instances which no other surgeon would ever have discovered to bear the smallest resemblance to smallpox. Mr Brown believes, that before his period of security is elapsed, persons who have been vac-

cinated are liable to be partially affected by the infection of smallpox: that at an early period, it produces a slight rash, at a more advanced period, papulæ, which disappear without suppurating, afterwards pustules, which continue a few days, and at length complete smallpox *. Accordingly, in some of his cases, we have a slight eruption of red pimples, most gravely described as a case of smallpox after: vaccination; in others, an eruption of hard! papulæ; in others, small pustules, which decayed in three days. Nay, what is: still more wonderful, we have cases set down by him as cases of natural smallpox succeeding to vaccination, in which there was no eruption at all; only a slight fever, which went off in two days. Any attempt to refute this doctrine by reasoning would be to insult the understanding of every man of common sense. The Reporters

^{*} Pages 257 and 263.

shall, therefore, merely state the result of an investigation of some of Mr Brown's Cases, which was made during, or immediately after, the prevalence of the disease.

Messrs Gillespie and Newbigging, surgeons in Edinburgh, having heard that several children in the village of Easter Duddingston, had been infected with natural smallpox after vaccination, proceeded, about twelve months ago, to that village, to investigate the truth of the report. They found the history of most of those cases to differ materially from that now given by Mr Brown.

The mother of Ellison and Thomas Baux, (the 11th and 12th cases of Mr Brown), assured Messrs Gillestie and Newbigging, that the eruption on her two children had the appearance of blisters, filled with a watery fluid, which began to

dry up, and to form scabs, about the fifth day; and were perfectly different from the smallpox with which two of her children, who had not been vaccinated, were affected about the same time.

In the case of Isabel Eal, (the 13th case of Mr Brown), they found the cicatrix on the arm large, but more resembling the cicatrix from superficial ulceration, than that from the regular vaccine affection. The eruption on this child was exactly similar to that on Ellison Baux.

Jean Wood, (the 14th case of Mr Brown), had an eruption of watery vesicles or blisters, which began to scab on the third day. This child, and about twenty others, had been vaccinated at the same time by Mr Gillespie, and none of the others had any eruptive disease.

Margaret Proudfoot, (the 15th case of Mr Brown), had an eruption similar to

that in the above cases, which was declared, by a medical person who saw her at the time, to be chicken-pox; and her brother, (the 16th case), was, according to Mr Brown's own account, sick for two days, but had no eruption, although he had passed Mr Brown's period of security, having been vaccinated six years and a half. Yet these two cases are included among Mr Brown's cases of smallpox succeeding to vaccination!

Elizabeth Saffley, (17th case), according to Mr Brown's own account, had a sharp fever, which, after two days, was succeeded by a rash, but no eruption. Yet this is also reckoned among his cases of small-pox after vaccination!

The 45th case is exactly similar. The child, he informs us, was extremely sick, and affected with starting, sneezing, and other symptoms of eruptive fever; but when Mr Brown called three days after,

expecting no doubt to find a crop of small-pox, the "sickness was gone, and no pus-"tular eruption had followed." Mr Brown, however, was determined not to be disappointed, for he sets this also down as a case of smallpox succeeding to vaccination!

The 6th case, by Mr Brown's own account, was not properly vaccinated; yet it also is mentioned as a case of small-pox after vaccination!

Messrs Gillespie and Newbigging insist, that the mothers, in describing the eruption on such of the children as had been vaccinated, uniformly mentioned it as similar to the nirles, or chicken-pox, and quite different from smallpox, which was at that time frequent and fatal in the village. Mr Brown's only argument to prove these cases to have been smallpox, is, that there was no chicken-pox raging in the neighbourhood. The Reporters

however insist, that many of these very cases were chicken-pox; and besides, Dr FARQUHARSON and Mr GILLESPIE attended many cases of chicken-pox both in children who had been vaccinated, and in others who had passed through the smallpox, in that neighbourhood, at the time when this disease was prevalent in Easter Duddingston; and lest Mr Brown should contend, that his cases were cases of smallpox, modified by previous vaccination, the following case puts the matter beyond a doubt, as the child never had been vaccinated:

Gilbert Mill, aged ten months, living in Easter Duddingston, and who had neither been vaccinated nor had smallpox, was affected about the same time with the children above mentioned, with an eruption of watery vesicles, resembling those on Ellison and Thomas Baux, which had decayed and were dried up by the fifth day.

The Reporters have had no opportunity of investigating the rest of Mr Brown's cases, but from the above specimen of what he calls cases of smallpox, it will be evident to every one with how great caution his statements are to be received. A connected view of his own description of his cases, will shew this in a still stronger light. It may be premised, that the distinctive character of smallpox is, that the pustules do not attain their full size till the eighth day, then begin to turn, and are converted into scabs by the eleventh or twelfth. Chicken-pox forms more rapidly, consists, during the first and second days, of watery vesicles, which sometimes burst while in that state; but the more perfect forms of it, as described by Dr WILLAN, go on to maturation, contain thick yellow matter, and do not decay till the sixth day. The eruption is often preceded by a smart fever for two or three days, sometimes by convulsions, and frequently leaves pits in the skin smaller than those

of smallpox, but which continue for life. Compare with this statement Mr Brown's account of his cases of natural smallpox. Six of them are stated to have had no eruption at all. Twenty-five of them decayed on or before the sixth day, many of these by the third and fourth; so that twenty-five of the forty-eight, from his own statement, exhibited the usual appearances of chicken-pox. Of the remaining seventeen, the Reporters next set aside two; one which he acknowledges to have been imperfectly vaccinated, and another which he states to have taken smallpox, without describing the appearances. Of, the remaining fifteen cases, only three are described as having decayed about the eighth day. The rest are described in the most vague manner, as having stood out till the sixth or seventh, seventh, and seventh or eighth day. It is farther to be particularly remarked, that the eruptive stage of chicken-pox often occupies several

days, so that in such cases the disease has, to a superficial observer, the appearance of continuing eight days. The first set of pustules decays about the fifth or sixth day. On the second day another set comes out, which decays perhaps on the seventh; and on the third day a third set, which decays on the seventh or eighth day. A person who sees such a case only on the seventh or eighth day, finds pustules fully maturated, and being informed that it is the seventh or eighth day of the disease, sets it down as smallpox. In this way are to be accounted for many cases which have been considered as smallpox after vaccination, and many also of an older date, in which persons were supposed to have taken smallpox twice. To distinguish such cases from the very mild forms of smallpox, considerable attention is necessary, and an accurate observation of the disease through its whole course. But we find nothing of this in Mr Brown's fifteen cases; many

of them he appears not to have seen during the course of the disease, but admitted them to have been cases of smallpox merely from the report of the parents, that the eruption stood out for six or seven, or seven or eight days. Others of them he did not see till the seventh or eighth day, and then found the eruption decaying, and some he appears not to have seen till the eruption was gone, but concludes it to have been smallpox from the blanes left in the skin. Upon the whole, it appears to the Reporters, that Mr Brown's statements of his cases are as vague and superficial as his theories are flimsy and hypothetical; and in an investigation of so delicate a nature as this, are absolutely inadmissible.

It is to be particularly observed, that Mr Brown mentions thirty or forty cases whom he vaccinated in the early part of his practice, and immediately afterwards inoculated with smallpox, as a test of the

vaccination having been perfect*. These are now much beyond Mr Brown's period of security, but not one of them has to his knowledge taken smallpox . Had he been willing to expose his doctrine to a fair test, he had an easy opportunity of doing so, by inoculating with small-pox some of these, now that the period of their security is past. Had they, or any of them, then taken the smallpox, Mr Brown would have had some grounds for sounding the alarm; but no such test was had recourse to. As Mr Brown, therefore, had it in his power fully and distinctly to ascertain the truth of his theory before submitting it to the public, and has omitted to do so, either he is chargeable with a culpable neglect of his duty to the public, or it must be concluded that he was afraid to commit his favourite doctrine to such a test. From

[†] See page 301.

every thing that now appears, indeed, even in Mr Brown's own book, there is the strongest reason to conclude, that if any of his cases really had smallpox, they had not been duly vaccinated; while, on the other hand, it seems abundantly evident, that by far the greater part of the cases which he dignifies with that name, bore no resemblance to smallpox.

The Surgeons have already stated, that Mr Brown's doctrine of the temporary protection of cowpox against the small-pox, is not new, and that it has often been refuted in the most satisfactory manner. Mr Brown, however, states, That as nearly, if not entirely, the whole of the experiments made to ascertain the antivariolous power of the cowpox, have been made within a few weeks or months after vaccination, they are therefore insufficient to remove the objection of its gradually wearing out of the constitu-

tion. See p. 255. Now, Mr Brown could not be ignorant of the numerous experiments and observations on this point, mentioned by Dr WILLAN, which extend from three to five years after vaccination. In these the patients were exposed to smallpox infection in every way, viz. by inoculation, by sleeping, playing, handling, and otherwise coming in contact with smallpox patients, with impunity. The Reporters repeat, that Mr Brown could not have been ignorant of these facts, seeing he has made a quotation from the pages in Dr WIL-LAN's book in which they are mentioned. Nay, what is still more extraordinary, he has quoted some of these very experiments, and with an ingenuity peculiar to himself, has made use of them to support his own doctrine. The following commentary, the Reporters think worthy of being preserved as a literary curiosity; it certainly is the most

extraordinary piece of reasoning they have ever met with in any professional writer, though by no means a solitary specimen of Mr Brown's reasoning. At page 16. of Dr Willan's book, some experiments of Dr Stanger are narrated in the following terms: "Dr Stanger, physician " to the Foundling Hospital, has favour-" ed me with the result of a series of "inoculations with variolous matter after " vaccination. Thirty-five children vac-"cinated between the 30th March 1801 and the end of May 1802, were inoculated with recent variolous matter on the 9th August 1802. most of these cases, the puncture presently healed; in some, slight inflammation was produced; and in three or four of the cases there appeared a small acuminated pustule, which, after some " days, was succeeded by a slight scab, no constitutional disorder having inter-

" vened. In November 1804, twenty-" one of the children vaccinated in 1801. " and afterwards variolated in 1802, were " a second time inoculated with matter " taken from a child labouring under the " natural smallpox. The result of this "trial, made three years and a half af-" ter vaccination, confirmed its preven-"tive power. The only effects produced "were slight inflammation about the " puncture, in some cases, and in a few " others, a small local pustule, which soon "disappeared." If words have any precise meaning, this passage evidently imports, that the appearances produced by the second inoculation with the matter of smallpox, at the distance of three years and a half after vaccination, were the very same as those produced by the first, at the distance of a few months after vaccination, and the inference is, that the antivariolous power was not diminished; for the details of the two sets of experi-

ments have as much the same meaning as as it is possible to express in the English language. But hear Mr Brown's commentary on the passage. At page 302 of his book, after quoting the above from Dr Willan, he says; "Now, I appre-" hend from this description, although a " very imperfect one, it clearly appears, "that what I have elsewhere contended " for is strikingly corroborated; for in " those inoculations which included only " periods of some months, to that of " twelve, only a very trifling effect, such " as I have already described, was pro-"duced; but when it came to be repeat-" ed at the distance of two or three," [Dr WILLAN says three and a half] " years, not only did the previous inocu-" lation afford no additional obstruction " to the progress of the second inocula-"tion, but now a greater inflammation, " and even pustules, were produced, di-" stinctly shewing that the immunity from

" smallpox was much weakened by the in" creased distance from vaccination." On
this commentary, the Reporters have only
to remark, that it is melancholy beyond
expression, to see a man of education
thus deluding himself, or attempting to
impose upon the public.

With regard to the facts which have occurred in the practice of the Surgeons of the Vaccine Institution, which tend to confirm or refute the doctrine of the mere temporary protection afforded by vaccination against the smallpox, the Reporters beg leave to state, that the result of their experience, is in strict conformity with that of Dr Jenner, and the other advocates of vaccination. They have lately inoculated with smallpox, children who were vaccinated eight and nine years ago, and find that they completely resist the disease; they have not been able to produce on any of them more

than a local inflammation, which disappeared in four or five days. They have almost every year visited numbers of children who were vaccinated during the first years of this institution, and this they have again done within these three months. In this investigation, they have found a great many of those who were vaccinated in the years 1801 and 1802, that is, seven and eight years since, who have been frequently and freely exposed, and especially within these last six months, to the contagion of the natural smallpox, by playing, sleeping, and otherwise mixing with children in all the different stages of that disease, without being infected.

The Surgeons shall conclude this Report with the following history, which was related to them since the publication of Mr Brown's book.—The wife of a carter, residing at the Sheriff-Brae of Leith, brought a young infant to the Vaccine

Institution to be inoculated with the cowpox: She stated, that the smallpox was very frequent in her neighbourhood, and that she had within these few months lost a child by that disease: On being asked why she had not brought that child to be vaccinated long ago, (for the child was two years old when he died from the smallpox), she replied, with tears, and expressions of the deepest regret, that she certainly would have done so, for that she had other two who had been inoculated at this Institution, one six and a half years ago, the other about four and a half years ago, but that she had heard some reports against the cowpox, and therefore had neglected doing it; but she said, that now she, and all her neighbours, were convinced, in spite of all the stories which were spread against the cowpox, that it certainly prevented the smallpox, because her two children who were vaccinated, as above mentioned, (and who, it will be observed, were both beyond Mr Brown's period of security against the epidemic smallpox), had slept in the same bed, eat out of the same dish, and used the same spoon with their brother, during the whole of his illness, and yet had entirely escaped the smallpox.

Wm. Farquharson.

James Bryce.

Alexander Gillespie.

John Abercrombie.

APPENDIX.

In the preceding Report, the Surgeons of the Vaccine Institution have made some strictures on the leading parts of Mr Brown's speculations on Vaccination. As that Report is now to be published at the desire of the Managers, they think it proper to add some further observations on Mr Brown's statements and reasonings, to shew upon what grounds the assertions contained in the Report are founded.

The Surgeons, in the first place, cannot help expressing their strong disapprobation of the manner in which Mr Brown has, in almost every part of his book, ascribed opinions to various authors without quoting their own words, or giving any reference to the part of their works in which he conceives these opinions to be stated. In this manner, he has ascribed opinions to the principal writers on Vaccination, which the Surgeons cannot find in any part of their writings; and others, which are in direct contradiction to the doctrines which these authors inculcate in the most particular manner. In some instances, he has quoted the words of an author with such changes as suited his own purpose, and which make the words convey a meaning very different from that which the author meant to express.

Mr Brown, at page 52. of his book, states, "The "Medical Council of the Jennerian Society admit,

[&]quot; that a few cases have been brought before them, where persons have taken the smallpox after having

" passed through the cowpox in a regular way;" &c. Now, this statement of Mr Brown's implies, that in those cases the persons had taken the smallpox after having actually passed through the cowpox in a regular way. On referring to the Report of the Royal Jennerian Society, however, it will be found, that no such admission is made. The words are, "It is admitted " by the Committee, that a few cases have been " brought before them of persons having the smallpox, " who had apparently passed through the cowpox in a " regular way." See the Report of the Medical Council of the Royal Jennerian Society for January 1806, Art. 9. And they afterwards go on to state their reasons for supposing that these persons, though apparently, had not actually passed regularly through the cowpox. See Art. 12. Now, it is evident, that Mr Brown, by omitting the word apparently, has materially changed the meaning of the passage. Not, however, contented with this, he afterwards states the same admission on the part of the Jennerian Society in still stronger terms. At page 276. he asserts, that "the " Royal Jennerian Society in London admit, that cases " of smallpox have occurred, where sufficient proof has existed of the most perfect vaccination." In the same page, the Royal College of Physicians in London, are said to have made the same admission; but no such admission is to be found in their Report. Concerning the antivariolous power of cowpox, the Report of the Royal College of Physicians states, "The security de-" rived from vaccination against the smallpox, if " not absolutely perfect, is as nearly so as can per-" haps be expected from any human discovery; for " among several hundred thousand cases, with the re-

" sults of which the College have been made acquaint-" ed, the number of alleged failures has been sur-" prisingly small, so much so, as to form certainly no " reasonable objection to the general adoption of vac-" cination." See page 4. Now, although there is every probability, from what Mr Brown has mentioned at page 51. of his book, for concluding that this is the passage in the Report of the College of Physicians from which he has made his statement, yet most assuredly there is no admission in it by the College, " that cases of smallpox have occurred where sufficient " proof has existed of the most perfect vaccination;" on the contrary, the failures are said to be "alleged " failures;" evidently implying, that a doubt existed either of the person having been sufficiently vaccinated, or of the disease which supervened being the smallpox; and accordingly, the College, in an after part of their Report, ascribe some of these failures " to the inexpe-" rience of the early vaccinators;" and state that " it is " not unreasonable to expect, that further observation. " will yet suggest many improvements that will re-" duce the number of anomalous cases, and furnish the " means of determining with greater precision when " the vaccine disease has been effectually received."

Again, at page 52., Mr Brown states: "The Col"lege conceive the practice of vaccination to be as
"completely established as the nature of such a que"stion admits," &c. Now, in the first place, the
practice of vaccination, is not a question; and, in the
second place, this statement of Mr Brown is quite different from the meaning of the College, expressed in

their Report. The words of the Report are, "The "truth (i. e. of the antivariolous power, or of the "propriety of vaccination) seems to be established as firmly as the nature of such a question admits," &c. page 7.

At page 99, Mr Brown has mentioned Mr Bryce as contending, that all the variety of vesicles have been found capable of giving the constitutional security. Now, one great object of Mr BRYCE's book on the cowpox, has been to maintain the contrary in the most particular manner. Mr Brown goes on to state in the same page: " Besides, he (Mr BRYCE) apprehends, " that a test can be obtained, by which it may be " uniformly ascertained, whether or not the vaccine " vesicle has exerted its antivariolous powers upon " the system; and therefore, as we are no longer dese pendent upon the phenomena attending the progress of the vesicle, all its different appearances may be disre-" garded." This is quite contrary to the doctrine stated in Mr BRYCE's book, and shews Mr BROWN to be totally ignorant of the nature of the test of perfect vacoination, proposed by Mr BRYCE; for it is only by particular attention to the appearances of the vesicles. so as to be able to contrast the progress of them with each other, that any advantage is to be obtained by performing this test.

At page 58., Mr Brown says: "He," Mr Breef, also states several cases of experiments where it would appear, and which he says shows distinctly, that if you vaccinate a day or two previous to introducing smallpox virus, you will uniformly find

that the variolous pustule proceeds not only slowly in its progress, but (has) its size and period of maturation considerably diminished." In so far as this statement can be understood, it appears to involve a complete contradiction; for the meaning of a pustule having its period of maturation considerably diminished, can only be, that it arrives at maturity in a shorter period of time, or more quickly than usual. The statement then stands thus, viz. if you vaccinate a day or two previous to introducing smallpox virus, you will uniformly find, that the variolous pustule proceeds not only slowly in its progresss, but more quickly than usual. Mr Bryce, never with his knowledge, made any experiments which could entitle him to say that they show distinctly such an absurdity.

Mr Brown has made a large extract, extending from the beginning of the 319th to the middle of the 325th page in his book, which he has imposed on his readers, one continued extract from Mr BRYCE's book on the Cowpox, to shew the insufficiency and uncertainty of vaccination. But on turning to Mr BRYCE's book, this apparently continued extract turns out to be a garbled production made by Mr Brown, to serve his his own purpose. Thus Mr Brown first gives one paragraph, beginning at page 139. and ending at page 140 of Mr BRYCE's book; he there finds some passages contrary to his doctrines and to his purpose, and therefore passes over six pages. At page 146., he finds part of a sentence which appears to suit his purpose, and takes it in; he then passes over ten pages, the contents of which serve to contradict some of his assertions and favourite doctrines. At page 156, he

again finds another sentence suitable to his purpose, and takes it in, but does not finish the paragraph. The continuation of this extract is now to be found in the Appendix to Mr Bryce's book, one part of it at page 111., and another part at page 113., Mr Brown always taking care to leave out what it is not convenient for him to insert, and thus, by not giving a proper view of the context, misrepresenting and mistating the whole subject.

Mr Brown has made a violent attack on Mr Bryce's discovery of the powers of the vaccine scab to produce perfect cowpox. At page 104., Mr Brown says, "Mr BRYCE asserts, that the scab or crust is " equally capable of producing the constitutional or " perfect disease with the most active limpid virus, is " one of the best modes of preserving the vaccine " virus fit for use, and that it is not liable to the same " objections as when in a viscid or opaque state." To this fact, ascertained by ample experience, Mr Brown opposes abundance of invective and reasoning. At page 69., he says, "All former absurdities and con-" tradictions were swallowed up in the opinion stated " by Mr BRYCE, who gravely asserted, upon the most " positive facts, that the scab was equally capable of " giving the genuine and constitutional disease with "the most limpid virus," &c. At page 105., Mr Brown states: "It appears to me impossible to con-"ceive, by any of the hitherto known laws of the " animal economy, or by any knowledge of anatomy, " that when a pustule or vesicle changes into the form " of a scab, that this scab consists of matter possessing " stronger powers than what it retained when in a state

" of fluidity," &c. Here Mr Brown artfully changes the statement made by Mr BRYCE, by the introduction of the word stronger. He then proceeds to consider this as hypothetical, and contrary to all analogy, and enters upon a long discussion about the functions of the skin, which the Surgeons do not pretend to understand, but which, after six or seven pages, brings about this remarkable admission: "Besides the ample testimony " given by Mr BRYCE and other practitioners, I am " also convinced, from my own experience, that it (the " scab) is cupable of producing the regular vesicle and " perfect disease; but farther than this I cannot go." See page 116. It is to be regretted, that Mr Brown has not told us what he thinks the most active limpid virus of cowpox can produce, more than the regular vesicle and perfect disease. Mr Brown's conclusion. after having admitted the above fact, is curious. In the very next page, he says,: "Upon the whole, I " think we are warranted to conclude, that if the vaccine " scab or crust really possesses the power of imparting " the complete effect of vaccination to the system, to " the same extent with the limpid virus, it is not only " in direct contradiction to general experience and ana-" logy, but also clearly evinces the imperfection and " inconsistency of the whole subject!!" See page 117.

At page 290., Mr Brown states, that smallpox, after vaccination, have occurred in numerous instances at Dunkeld, Haddington, and some other places, and mentions particularly a case which occurred lately at Dunkeld, in which the smallpox proved fatal. The Surgeous happen to be acquainted with the circumstances of this case, and think that Mr Brown would have

done well to have inquired into them more particularly before publishing his account of it. The child was vaccinated by an old woman, a country midwife. The father of the child was convinced, that the inoculation did not take effect in a proper manner; but neglected to have it repeated, and the child died of smallpox. Several others who were vaccinated by the same woman, have also taken the smallpox. The Surgeons have also heard of some children in the neighbourhood of Haddington who have taken the smallpox after being inoculated for the cowpox by a servant. Such occurrences, no man of candour or common sense will ever consider as operating to the prejudice of vaccination.